

MSDS Number: T5382 * * * * * Effective Date: 05/17/01 * * * * * Supercedes: 06/02/98

MSDS Material Safety Data Sheet

From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08865



24 Hour Emergency Telephone: 908-859-2151
CHEMTREC: 1-800-424-9300

National Response in Canada
CANUTEC: 613-996-6666

Outside U.S. and Canada
Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

TRIETHYLENE GLYCOL

1. Product Identification

Synonyms: Ethanol, 2,2'-[1,2-ethanediylbis(oxy)]bis-; triglycol; ethylene glycol dihydroxy-diethyl ether

CAS No.: 112-27-6

Molecular Weight: 150.20

Chemical Formula: C₆H₁₄O₄

Product Codes:

J.T. Baker: W660

Mallinckrodt: 2735

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
Hazardous		
-----	-----	-----

Triethylene Glycol	112-27-6	90 - 100%
Yes		

3. Hazards Identification

Emergency Overview

WARNING! CAUSES EYE IRRITATION. MAY CAUSE SKIN IRRITATION.

J.T. Baker SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 0 - None

Flammability Rating: 1 - Slight

Reactivity Rating: 0 - None

Contact Rating: 1 - Slight

Lab Protective Equip: GOGGLES; LAB COAT

Storage Color Code: Orange (General Storage)

Potential Health Effects

Inhalation:

No adverse health effects expected from inhalation.

Ingestion:

No adverse effects expected.

Skin Contact:

Prolonged exposure may cause skin irritation.

Eye Contact:

Splashing in eye causes irritation with transitory disturbances of corneal epithelium.

However, these effects diminish and no permanent injury is expected. Vapors are non-irritating.

Chronic Exposure:

Possible skin irritation.

Aggravation of Pre-existing Conditions:

No information found.

4. First Aid Measures

Inhalation:

Remove to fresh air. Not expected to require first aid measures.

Ingestion:

If large amounts were swallowed, give water to drink and get medical advice.

Skin Contact:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops..

Eye Contact:

If splash occurs, immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Call a physician.

5. Fire Fighting Measures

Fire:

Flash point: 177C (351F) CC

Autoignition temperature: 371C (700F)

Flammable limits in air % by volume:

lel: 0.9; uel: 9.2

Slight fire hazard when exposed to heat or flame.

Explosion:

Above the flash point, explosive vapor-air mixtures may be formed.

Fire Extinguishing Media:

Water spray, dry chemical, alcohol foam, or carbon dioxide. Water or foam may cause frothing.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from heat, ignition sources and oxidizing agents. Protect from freezing. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System:

Not expected to require any special ventilation.

Personal Respirators (NIOSH Approved):

Not expected to require personal respirator usage.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

Clear, colorless liquid.

Odor:

Odorless.

Solubility:

Miscible in water.

Specific Gravity:

1.1274 @ 15C/4C

pH:

No information found.

% Volatiles by volume @ 21C (70F):

100

Boiling Point:

285C (545F)

Melting Point:

-5C (23F)

Vapor Density (Air=1):

5.17

Vapor Pressure (mm Hg):

< 0.01 @ 20C (68F)

Evaporation Rate (BuAc=1):

0.01

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage. Hygroscopic.

Hazardous Decomposition Products:

Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Strong oxidizers.

Conditions to Avoid:

Heat, flames, ignition sources and incompatibles.

11. Toxicological Information

Oral rat LD50: 17 gm/kg; investigated as a reproductive effector.

-----\Cancer Lists\-----			
Ingredient Category	---NTP Carcinogen---		IARC
	Known	Anticipated	

Triethylene Glycol (112-27-6)	No	No	
None			

12. Ecological Information

Environmental Fate:

When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is not expected to evaporate significantly. When released into water, this material is expected to readily biodegrade. When released into water, this

material is not expected to evaporate significantly. This material has a log octanol-water partition coefficient of less than 3.0. This material is not expected to significantly bioaccumulate. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life of less than 1 day.

Environmental Toxicity:

This material is expected to be slightly toxic to aquatic life. The LC50/96-hour values for fish are between 10 and 100 mg/l.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

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-----\Chemical Inventory Status - Part 1\-----
-----
Ingredient                                TSCA  EC    Japan
Australia
-----
Triethylene Glycol (112-27-6)            Yes   Yes   Yes
Yes
  
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-----\Chemical Inventory Status - Part 2\-----
-----
Ingredient                                Korea  DSL  --Canada--
Phil.                                     NDSL
-----
Triethylene Glycol (112-27-6)            Yes   Yes   No
Yes
  
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-----\Federal, State & International Regulations - Part 1\-----
-----
-SARA 302-          -----SARA
313-----
  
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Ingredient Chemical Catg.	RQ	TPQ	List
----- ----- Triethylene Glycol (112-27-6) No	No	No	No
-----\Federal, State & International Regulations - Part 2\----- -----			
TSCA- Ingredient	CERCLA	261.33	8(d)
----- ----- Triethylene Glycol (112-27-6)	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No
Reactivity: No (Pure / Liquid)

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: **1** Flammability: **1** Reactivity: **0**

Label Hazard Warning:

WARNING! CAUSES EYE IRRITATION. MAY CAUSE SKIN IRRITATION.

Label Precautions:

Avoid contact with eyes, skin and clothing.

Wash thoroughly after handling.

Label First Aid:

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Call a physician.

Product Use:

Laboratory Reagent.

Revision Information:

No changes.

Disclaimer:

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